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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,046	12/20/2000	Jerry Mizell	13729RR	9952

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Garlick & Harrison
P.O. Box 670007
Dallas, TX 75367

EXAMINER
MILLER, BRANDON J

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/742,046	MIZELL ET AL.
	Examiner	Art Unit	
	Brandon J Miller	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *14 September 2004* .

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-15* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-15* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

　　If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☐ All b) ☐ Some * c) ☐ None of:

　　　1. ☐ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

　　a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
manner in which the invention was made.

Claims 1-6 and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Heinonen and Schroeder.

Regarding claim 1 Heinonen teaches a mobile terminal comprising: a processor, a

memory, and transceiver circuitry (see col. 5, lines 18-21, 36-38 & 44-46). Heinonen teaches

receiving an SMS message over a wireless communication link in one of legacy SMS message

format or a packet data format (see col. 3, lines 61-67 and col. 5, lines 6-17). Heinonen teaches a

packet data network such as the Internet (see col. 1, lines 62-64). Heinonen teaches forwarding

the SMS message to one of a legacy SMS message processing block or a packet data SMS

message processing block, based upon whether the SMS message received over the wireless

communication link was received in the legacy SMS message format or the packet data format

(see col. 5, lines 18-30 and col. 6, lines 52-55 & 61-63). Heinonen does not specifically teach an

internal bus coupled to the memory, to the transceiver circuitry, and to the processor, computer

instructions that define operational logic of the mobile terminal, or logic to enable the mobile

terminal to remove IP packet header information of a plurality of data packets to construct an

SMS message. Schroeder teaches an internal bus coupled to the memory, to the transceiver circuitry, and to the processor (see col. 3, lines 52-59). Schroeder teaches computer instructions that define operational logic of a mobile terminal (see col. 12, lines 3-10). Schroeder teaches enabling a mobile terminal to remove packet header information of a plurality of data packets (see col. 2, lines 16-18 and col. 8, lines 26-28 & 37-41). Schroeder also teaches displaying a received message (see col. 9, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include an internal bus coupled to the memory, to the transceiver circuitry, and to the processor, computer instructions that define operational logic of the mobile terminal, and logic to enable the mobile terminal to remove IP packet header information of a plurality of data packets to construct an SMS message because this would allow for an improved wireless data information service allowing for a combination of network routing.

Regarding claim 2 Heinonen teaches enabling a mobile terminal to process a constructed an SMS message (see col. 3, lines 61-67).

Regarding claim 3 Schroeder teaches an audio processing circuit for generating audio to be played over a speaker, which audio signals were received as a digital signal by the mobile terminal (see col. 3, lines 59-64).

Regarding claim 4 Schroeder teaches a speaker coupled to receive an analog signal from audio processing circuitry wherein the speaker creates audio for human perception (see col. 3, lines 59-64).

Regarding claim 5 Schroeder teaches a microphone for converting sound into electrical signals, which electrical signals are transmitted to an audio processor (see col. 3, lines 52-57 & 64-65).

Regarding claim 6 Heinonen teaches a mobile terminal, comprising: transceiver circuitry for receiving communication signals over a wireless communication link (see col. 5, lines 6-9 & 18-21). Heinonen teaches circuitry for receiving an SMS message over a wireless communication link in one of a legacy SMS message format or a data packet format (see col. 3, lines 61-67 and col. 5, lines 6-17). Heinonen teaches a packet data network such as the Internet (see col. 1, lines 62-64). Heinonen teaches forwarding the SMS message to one of a legacy SMS message processing block or a packet data SMS message processing block, based upon whether the SMS message received over the wireless communication link was received in the legacy SMS message format or the packet data format (see col. 5, lines 18-30 and col. 6, lines 52-55 & 61-63). Heinonen teaches SMS message processing circuitry for processing SMS messages transmitted over the wireless communication link in data packet format, the processing circuitry being coupled to receive data packets from the transceiver circuitry (see col. 5, lines 18-21 & 24-30). Heinonen does not specifically mention reconstructing SMS messages. Schroeder teaches receiving data packets and examining them to determine the information included in an SMS message (see col. 8, lines 25-28 & 64-65). Schroeder also teaches displaying a received message (see col. 9, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include reconstructing SMS messages because this would allow for an improved wireless data information service allowing for an improved wireless data information service allowing for a combination of network routing.

Regarding claim 8 Schroeder teaches audio processing circuitry coupled to receive communication signals from the transceiver circuitry (see col. 3, lines 59-64).

Regarding claim 9 Schroeder teaches a speaker coupled to the audio processing circuitry for producing sound (see col. 3, lines 59-64).

Regarding claim 10 Schroeder teaches a microphone for receiving sound waves and for converting the received sound waves into electrical signals that are to be produced to the audio processor for processing (see col. 3, lines 52-57 & 64-65).

Regarding claim 11 Heinonen teaches a method in a GPRS capable mobile terminal for receiving an SMS message (see col. 5, lines 6-17). Heinonen teaches receiving a plurality of data packets over a wireless communication link wherein the plurality of data packets represents an SMS message and determining that the plurality of data packets represents an SMS message (see col. 5, lines 23-30). Heinonen teaches a packet data network such as the Internet (see col. 1, lines 62-64). Heinonen teaches forwarding the SMS message for processing by SMS processing circuitry within the mobile terminal (see col. 5, lines 18-30 and col. 6, lines 52-55). Heinonen does not specifically mention removing packet header information and reforming an SMS message with SMS packet headers. Schroeder teaches removing packet header information (see col. 8, lines 25-28 & 64-65). Schroeder also teaches displaying a received message (see col. 9, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include removing packet header information and reforming an SMS message with SMS packet headers because this would allow for an improved wireless data information service allowing for a combination of network routing.

Regarding claim 12 Heinonen teaches receiving an SMS message in a legacy format and then processing the SMS message by the SMS processing circuitry within the mobile terminal (see col. 5, lines 6-13 and col. 6, lines 52-55).

Regarding claim 13 Heinonen teaches transmitting an SMS message from the mobile terminal to a base station in a data packet form (see col. 5, lines 6-8 and col. 6, lines 56-60).

Regarding claim 14 Heinonen teaches converting an outgoing SMS message into a plurality of data packets (see col. 3, lines 64-67).

Regarding claim 15 Heinonen and Schroeder teach a device as recited in claim 14 except for inserting an IP address of a message center within a header of each of the data packets. Schroeder does teach address information included within a header of each data packet (see col. 8, lines 26-28 & 37-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include inserting an IP address of a message center within a header of each of the data packets because this would efficiently distinguish each SMS message by at least type and/or source.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heinonen in view of Schroeder and Josse.

Regarding claim 7 Heinonen and Schroeder teach a device as recited in claim 6 except for legacy SMS message processing wherein the mobile terminal is coupled to receive SMS messages in both IP data packet and in legacy SMS message formats within a tunneling protocol. Hienonen does teach legacy SMS message processing wherein the mobile terminal is coupled to receive SMS messages in both data packet and in legacy SMS message formats (see col. 3, lines 61-67 and col. 5, lines 6-17). Heinonen does teach a packet data network such as the Internet

(see col. 1, lines 62-64). Josse teaches routing message within a tunneling protocol (see col. 7, lines 49-57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include legacy SMS message processing wherein the mobile terminal is coupled to receive SMS messages in both IP data packet and in legacy SMS message formats within a tunneling protocol because this would allow for a flexible routing mechanism that allows for a combination of network routing.

Response to Arguments

Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sim European Patent Application EP 1 039 768 A2 discloses a data transmitting and receiving apparatus and method for a digital mobile station.

Lohtia et al. US 6,560,456 B1 discloses a system and method for providing subscriber-initiated information over the short message service (SMS) or a microbrowser.

Laiho US 5,978,685 discloses digital cellular telecommunications with short message service over the packet channel.

Lupien et al. US 6,560,456 B1 discloses an integrated radio telecommunications network and method of interworking an ANSI-41 network and the general packet radio service (GPRS).

Ahopelto et al. US 5,970,059 discloses a packet radio system and methods for a protocol-independent routing of a data packet in packet radio networks.
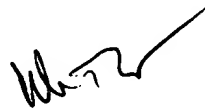
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 12, 2005

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600